INTERFERENCE SUPPRESSION FOR WIRELESS LOCAL AREA NETWORK AND LOCATION SYSTEM

Abstract of the Disclosure

A wireless local area network and location system for locating objects within a monitored environment are disclosed. A plurality of access point

5 stations receive and transmit communication signals within a wireless local area network. A processor is operatively connected to each of the access point stations and operative for processing communication signals received from the mobile station and, in one

10 embodiment, determining which communication signals are first-to-arrive signals and conducting differentiation of the first-to-arrive signals to locate a mobile station. Delayed versions of at least one interference signal are weighted and the amplitude and phase

15 controlled with weighted functions W_1, W_2 ... W_n. The resultant weighted replicas are summed to determine an approximation of disbursed interference for cancelling interference. The location system can include a tag transmitter and spaced monitoring receivers and

20 processor.